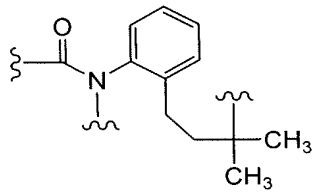
REMARKS

For reasons discussed below, Applicants have amended Claims 19 and 20 to limit group L to the phenylene moiety L-1 and have accordingly canceled Claim 21 as redundant and Claim 22 as now outside the scope of their claims. The core technical feature identified by the formula at page 4 of the Office Action can thus now be represented by the general formula



For reasons also discussed below, Applicants have amended Claims 19 and 20 to limit group R^1 to hydrogen, C_1-C_8-alkyl, or C_1-C_6-haloalkyl, to exclude hydrogen from the definition of group R^3, and to limit group A to (A1) through (A4) and (A10) through (A12). In view of the limitation on R^3, Applicants have canceled Claim 26 as redundant and Claim 25 as now outside the scope of their claims.

Applicants submit that their claims remain fully supported in the specification and again reserve the right to file one or more divisional applications directed to the non-elected subject matter.

Information Disclosure Statement

The Office Action at page 2 acknowledges receipt of Applicants' Information Disclosure Statement but indicated that the IDS fail to comply fully with 37 C.F.R. 1.98(a)(2) with respect to certain cited documents that the Office Action indicates were not provided.

Applicants note in this respect that the "371 Acceptance Letter" shows that the International Search Report ("ISR") and other relevant documents were received by the US PTO from the International Bureau. Although the 371 Letter does not explicitly indicate that the references cited in the ISR and IPER were provided, it is the normally expected practice for WIPO to provide such documents. Applicants' Form PTO-1449 accordingly identified such documents by a double asterisk to indicate WIPO submission. Examination of such references is mandatory whenever they are received. E.g., MPEP Section 609.03 – Information Disclosure Statements in National Stage Applications. However, for the convenience of the Examiner,

Applicants now identify counterpart U.S. patents and published applications of several of the cited documents and provide copies of the other apparently missing documents and respectfully request their consideration.

Applicants note with respect to the documents cited on **Sheet 1** of the previously submitted Form PTO 1449:

Doc. AM WO 03/010149 – a counterpart is U.S. Publication 2004/0204470 (published October 14, 2004)

Doc. AN WO 02/38542 – counterparts are U.S. Patent 7,105,565 (issued September 12, 2006) and U.S. Publication 2006/0189676 (published August 24, 2006)

Doc. AO EP824099 – counterparts are U.S. Patents 5,965,774 (issued October 12, 1999) and 5,914,344 (issued June 22, 1999) [the '774 patent was cited in the Office Action]

Doc. AR WO 2004/002481 and CAS abstract – an issued counterpart is U.S. Patent 7,384,967 (issued June 10, 2008)

Doc. AS Kessler et al article provided in English

Doc. AT Harvey et al article provided in English

Applicants similarly note with respect to the documents cited on **Sheet 2** of the previously submitted Form PTO 1449:

Doc. AS Hannig et al article and English abstract provided

Doc. AT Tabuchi et al article provided in English

Restriction Requirement under 35 U.S.C. 121

Applicants acknowledge that the Office Action has maintained the restriction as it relates to Group VII (i.e., method Claim 29). However, because Applicants believe that the examined claims as amended are allowable, Applicants have not canceled Claim 29 but again request rejoinder.

Applicants also acknowledge that the Office Action has withdrawn Claim 22 (for which group L is limited to L-2) but respectfully submit that any rejections or objections to Claim 22 are rendered moot by its cancellation.

Finally, Applicants acknowledge that the Office Action has withdrawn Claim 25 (in which R^3 is limited to hydrogen). Although Applicants have canceled Claim 25, they reserve the right to file one or more divisional applications directed to the non-elected subject matter.

Rejections under 35 U.S.C. 112

A. Written Description Requirement

1. Claim 28

Claim 28 stands rejected under 35 U.S.C. 112, first paragraph, as failing to comply with the written description requirement with respect to the term "unwanted microorganism." Applicants have amended Claim 28 to specify a composition for controlling phytopathogenic fungi as specifically taught in the specification at page 41, lines 4-5, and (as noted in the Office Action at page 6) exemplified in the use examples. Applicants therefore respectfully submit that they have traversed the rejection.

2. Claims 19-21, 23, 24, 26, and 28

Claims 19-21, 23, 24, 26, and 28 stand rejected under 35 U.S.C. 112, first paragraph, as failing to comply with the written description requirement with respect to the scope of the claims. Applicants respectfully traverse.

The Office Action at page 8 acknowledges that a disclosure having "a sufficient number of representative species" is sufficient to provide an adequate description of a claimed genus but asserts that Applicants have provided an insufficient number of such species to support their claims. Applicants respectfully submit that the Office Action is overly restrictive, particularly in how it refers to reduction to practice as the criterion.

The U.S. Patent and Trademark Office Board of Patent Appeals and Interferences in its 1992 decision In *Staehelin v. Secher*, 24 U.S.P.Q.2d 1513 (B.P.A.I. 1992), presented a thorough explanation of both the "enablement" and "written description" requirements of 35 U.S.C. 112. With respect to enablement, the Board explained that "the law does not require a specification to be a blueprint" because requiring the specification to provide every minute detail "would turn [patent applications] into production specifications, which they were never intended to be." 24 U.S.P.Q.2d at 1516. The Board reaffirmed the well-established principle that it is only undue experimentation by one skilled in the art -- not the need for some experimentation -- that is contrary to the enablement requirement. E.g., 24 U.S.P.Q.2d at 1517, 1518. See also *Impax Laboratories v. Aventis Pharmaceuticals*, 88 U.S.P.Q.2d 1381 (Fed. Cir. 2008). With respect to the written description requirement, the Board observed that this requirement is intended to ensure that

applicants had possession of a claimed invention as of the filing date and reaffirmed the well-established principle that the requirement is satisfied if the application reasonably conveys this fact to those skilled in the art. E.g., 24 U.S.P.Q.2d at 1519. See also *In re Johnson and Farnham*, 194 U.S.P.Q. 187, 195 (C.C.P.A. 1977), and *In re Moore and Janoski*, 439 F.2d 1232, 169 U.S.P.Q. 236, 239 (C.C.P.A. 1971). Other often-cited decisions are fully consistent with these principles. Applicants' specification provides much more extensive teachings than suggested, for example, by the two-compound subgenus at issue in *In re Gostelli*, 872 F.2d 1008, 10 U.S.P.Q.2d 1614 (Fed. Cir. 1989), or addressed in later decisions such as *University of California v. Eli Lilly and Co.*, 119 F.3d 1559, 43 U.S.P.Q.2d 1398 (Fed. Cir. 1997). In any case, Applicants find no support for a requirement for actual reduction to practice for all claimed embodiments. Applicants submit that their specification and claims fully comply with the written description requirement.

For example, while it may be true that Applicants define their compounds broadly, their specification provides exhaustive teachings about how to make their compounds using any of ten process variants (i.e., processes (a) through (i)) that extend from page 21 through page 39. (The description of process (a) alone extends from page 21 to page 28.) Certainly, those skilled in the art would have no difficulty whatsoever in understanding how to prepare the claimed compounds. Furthermore, Applicants do not provide mere lists of possible substituents as suggested in the Office Action at page 10. In addition to the disclosure of selected compounds within the process descriptions, Applicants' specification discloses 24 specific compounds having a variety of different substituents. As discussed above, all such compounds are characterized by a group L limited to phenylenes L-1 and the amendments to the claims reflect this limitation. However, Applicants submit that the other groups are sufficiently related to those found in the disclosed compounds to lead those skilled in the art to the reasonable conclusion that the compounds would share a commonality of relevant properties. [This is particularly true for group A, for which several representative members are present in tested compounds (as mentioned below) and which are structurally similar to the other five- and six-membered cyclic moieties specified in the claims.] In support of their position in this regard, Applicants point out that all of the tested compounds of their invention, despite having variations in the substituents, exhibited excellent biological activity against a variety of infestations.

See use examples at pages 58-71. Applicant maintain that the Office Action has not presented evidence that is inconsistent with their reasonable belief in a commonality of properties for the claimed compounds. Compare *In re Marzocchi and Horton*, 439 F.2d 220, 169 U.S.P.Q. 367, 370 (C.C.P.A. 1971); see also *In re Bundy*, 642 F.2d 430, 209 U.S.P.Q. 48, 51 (C.C.P.A. 1981).

Notwithstanding their belief that their claims satisfy the written description requirements of 35 U.S.C. 112 (and without admissions in this regard), Applicants have amended their claims to limit group L limited to phenylenes L-1 and group A to (A1) through (A4) and (A10) through (A12). On the other hand, based in Applicants' reasonable belief that they have specified appropriate Markush groups of sufficiently related substituents that the compounds they contain would share a commonality of properties, Applicants have not narrowed the definitions of the substituents on the various ring systems of group A (particularly R^{11}, R^{12}, and R^{13} of pyrazoles (A1) as mentioned in the Office Action at pages 9-10).

Applicants therefore respectfully submit that their claims as amended satisfy the written description requirement of 35 U.S.C. 112.

B. Indefiniteness

1. Term "carboxanilide"

Claims 19-21, 23, 24, 26, and 28 stand rejected under 35 U.S.C. 112, second paragraph, as being indefinite with respect to the term "carboxanilide" because only group L-1 represents a phenyl group attached to a nitrogen atom. Although the term anilide is not strictly correct when L is one of the thiophene groups L-2, L-3, or L-4, Applicants' claims are now limited to embodiments in which L is phenyl (or, more properly, phenylene), for which the term anilide is appropriate. Applicants respectfully submit that they have therefore traversed this rejection.

2. Term "and/or"

Claims 19-21, 23, 24, 26, and 28 stand rejected under 35 U.S.C. 112, second paragraph, as being indefinite with respect to the term "and/or" as used in the definitions of the various groups. Applicants respectfully traverse.

It is well established that claims are not indefinite if they "set out and circumscribe a particular area with a reasonable degree of precision and particularity" as readily understood by one of ordinary skill in the art in view of the teachings of the prior art and the supporting disclosure. *In re Moore and Janoski*,

439 F.2d 1232, 1235, 169 U.S.P.Q. 236, 238 (C.C.P.A. 1971) (emphasis added); see also *In re Johnson and Farnham*, 194 U.S.P.Q. 187, 193 (C.C.P.A. 1977). When preparing the claims of the present application, Applicants chose a compact construction based on the use of the long-used and unambiguous term "and/or". See, e.g., *Webster's New Collegiate Dictionary*, G. & C. Merriam Company (Springfield, Mass., 1977) at page 43 ("two words or expressions are to be taken together or alternatively"). In view of the very limited number of individual elements used in their claims (i.e., the term "fluorine, chlorine, and/or bromine atoms" used several times in the various R group definitions, the term "extenders and/or surfactants" used in Claim 28, and the term "extenders and/or surfactants" used in withdrawn Claim 29), Applicants submit that those skilled in the art would readily understand – as assumed in the Office Action at the bottom of page 14 – that the term "and/or" would indicate the use of the individual elements individually or in all functionally or chemically reasonable combinations.

Applicants respectfully submit that their uses of the term "and/or" fully satisfy the definiteness requirements of 35 U.S.C. 112.

3. Term "unwanted"

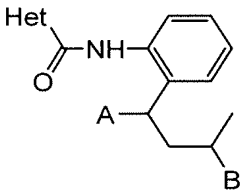
Claim 28 stands rejected under 35 U.S.C. 112, second paragraph, as being indefinite with respect to the term "unwanted." In view of the amendment discussed above (which deletes the term altogether), Applicants respectfully submit that they have traversed this rejection.

Rejection under 35 U.S.C. 103

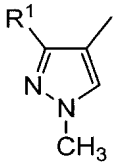
Claims 19-21, 23, 24, 26, and 28 stand rejected under 35 U.S.C. 103(a) as being unpatentable over U.S. Patent 5,965,774 ("Yoshikawa et al"). [This patent is a counterpart of EP 0824099, which was cited by Applicants on their Form PTO 1449 but was struck out by the Examiner.] Applicants respectfully traverse.

Applicants first note that the Office Action at 16 has applied a dictionary meaning of the word "control" as used in Claim 28 that generally appears to comport with an understood meaning used by those skilled in the agrochemical arts, namely "to reduce of the incidence or severity of especially to innocuous levels" (which the web site exemplifies by referring to "control [of] an insect population").

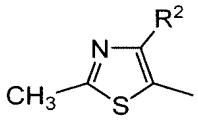
Yoshikawa et al discloses a very narrowly defined set of plant disease controlling carboxanilide derivatives having the formula



in which **A** is hydrogen or methyl, **B** is methyl or ethyl (except that A is not methyl when B is ethyl), and **Het** is a group having one of the formulas



or

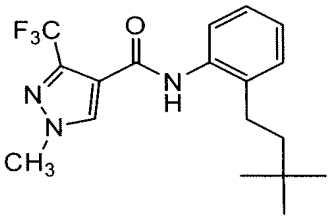


(where $\mathbf{R^1}$ is trifluoromethyl or difluoromethyl and $\mathbf{R^2}$ is trifluoromethyl, difluoromethyl, or methyl), and compositions thereof, as well as various intermediates used to prepare such compounds. E.g., column 4, lines 22-66, and following text. It is clear that Yoshikawa et al does not teach or suggest compounds in which the alkyl side chain can terminate with three groups attached to one carbon atom.

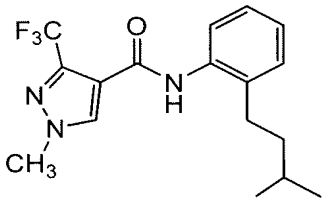
Applicants' claims, in contrast, require R^3 to be halogen, alkyl, or haloalkyl, meaning that the alkyl side chain of their claimed compounds must terminate with three groups attached to one carbon atom (i.e., $-C(CH_3)_3$, also known as t-butyl).

The Office Action, in reliance on *In re Wood, Whittaker, Stirling, and Ohta*, 199 USPQ 137, 582 F2d 638 (C.C.P.A. 1978), states that hydrogen and methyl substitutions are known in the art and concludes that replacing a methyl with a hydrogen at the alkyl C-1 position and replacing a hydrogen with a methyl at the alkyl C-3 position would lead those skilled in the art from Yoshikawa et al to their claimed invention. However, the known greater steric bulk of the t-butyl (i.e., $-C(CH_3)_3$) group compared to the less bulky isopropyl (i.e., $-CH(CH_3)_2$) and ethyl (i.e., $-CH_2CH_3$) groups does not lead to a comfortable level of biological predictability.

Furthermore, Applicants now present supporting data in the form of new Declarations of Dr. Ulrike Wachendorff-Neumann and Dr. Peter Dahmen. These data, which were obtained in tests carried out against four different organisms at three different application rates, show that a compound falling within the scope of Applicants' claims having the formula



which corresponds to a compound of their formula (I) in which R^3 is CH_3 such that the alkyl side chain has a t-butyl terminal group, is superior in all of the tests when compared with the corresponding compound of Example 4 of Yoshikawa et al having the formula



in which the alkyl side chain has a isopropyl terminal group. Applicants maintain that those skilled in the art would not have expected such differences.

Applicants therefore submit that their claimed invention is not rendered obvious by Yoshikawa et al.

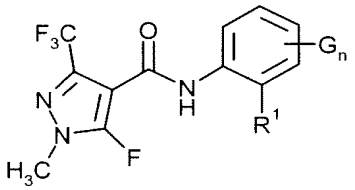
Double Patenting Rejections

The claims have been rejected under the judicially created doctrine of obviousness-type double patenting over various claims of one issued patent (formerly copending) and seven still copending applications as identified below.

A. U.S. Patent 7,358,214

Claims 19-21, 23, 24, 26, and 28 stand rejected under the judicially created doctrine of obviousness-type double patenting over Claims 1-7 and 9 of U.S. Patent 7,358,214. Applicants respectfully traverse.

The '214 patent discloses and claims pyrazolylcarboxanilides having the formula



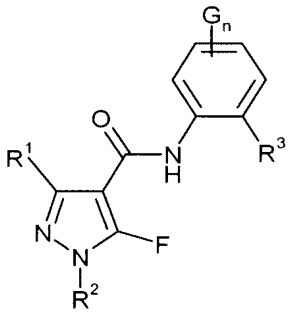
in which **R**^{1} is unsubstituted C_2-C_{20}-alkyl or substituted C_1-C_{20}-alkyl (where the substituents are halogen or cycloalkyl) or represents alkenyl or alkynyl that are each optionally substituted by halogen or by optionally substituted cycloalkyl; **G** is halogen or alkyl; and **n** is 0, 1, or 2. E.g., column 1, lines 15-43.

Although Applicants believe that their claimed invention is patentably distinct from the '214 patent, Applicants would be willing to submit an appropriate terminal disclaimer as suggested in the Office Action if their claims are otherwise found allowable.

B. U.S. Application Serial No. 10/484,108

Claims 19-21, 23, 24, 26, and 28 stand provisionally rejected under the judicially created doctrine of obviousness-type double patenting over Claims 22-28, 31-33, 35, and 38 of U.S. Application Serial No. 10/484,108 (which has been published as US 2004/0204470). Applicants respectfully traverse.

The '108 application discloses pyrazolylcarboxanilides having the formula



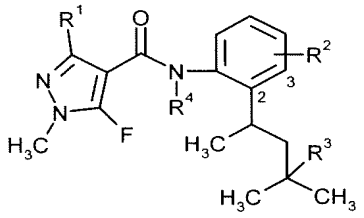
in which **R**^{1} is hydrogen, cyano, halogen, nitro, (halo)alkyl cycloalkyl, (halo)alkoxy, (halo)alkylthio, or aminocarbonylalkyl; **R**^{2} is hydrogen, (halo)alkyl, alkenyl, cycloalkyl, (halo)alkylthioalkyl, or (halo)alkoxyalkyl; **R**^{3} is unsubstituted C_1-C_{20}-alkyl or substituted C_1-C_{20}-alkyl (where the substituents are halogen or cycloalkyl) or represents alkenyl or alkynyl that are each optionally substituted by halogen or optionally substituted cycloalkyl; **G** is halogen or alkyl; and **n** is 0, 1, or 2. E.g., US 2004/0204470 at paragraphs [0003] to [0010].

Although Applicants believe that their claimed invention is patentably distinct from the '108 application, Applicants would be willing to submit an appropriate terminal disclaimer as suggested in the Office Action if their claims are otherwise found allowable.

C. U.S. Application Serial No. 10/576,050

Claims 19-21, 23, 24, 26, and 28 stand provisionally rejected under the judicially created doctrine of obviousness-type double patenting over Claims 13-17 and 20 of U.S. Application Serial No. 10/576,050 (which has been published as US 2007/0072930). Applicants respectfully traverse.

The '050 application discloses N-substituted pyrazolylcarboxanilides having the formula



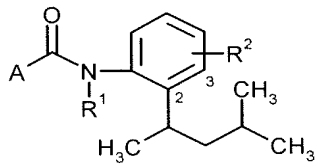
in which **R^1** is methyl, trifluoromethyl, or difluoromethyl; **R^2** is hydrogen, fluorine, chlorine, methyl or trifluoromethyl; **R^3** is hydrogen, halogen, or (halo)alkyl; and **R^4** is (halo)alkyl, haloalkylthio, (halo)alkylsulphinyl, (halo)alkylsulphonyl, (halo)alkoxyalkyl, (halo)cycloalkyl, formyl, formylalkyl, (halo)alkylcarbonylalkyl, (halo)alkoxycarbonyl-alkyl, (halo)cycloalkylcarbonyl, -C(=O)C(=O)R^5 (where R^5 is hydrogen, (halo)alkyl, (halo)alkoxy, (halo)alkoxyalkyl, or (halo)cycloalkyl), -CONR^{6}R^7 (where R^6 and R^7 are independently hydrogen, (halo)alkyl, (halo)alkoxyalkyl, or (halo)cycloalkyl, or together form a heterocycle), or -CH_2NR^{8}R^9 (where R^8 and R^9 are independently hydrogen, (halo)alkyl, or (halo)cycloalkyl, or together form a heterocycle), with the proviso that when R^3 is hydrogen, R^4 can also be (halo)alkylcarbonyl, (halo)alkoxy-carbonyl, or (halo)alkoxyalkylcarbonyl. E.g., US 2007/0072930 at paragraphs [0003] to [0015].

Although Applicants believe that their claimed invention is patentably distinct from the '050 application, Applicants would be willing to submit an appropriate terminal disclaimer as suggested in the Office Action if their claims are otherwise found allowable.

D. U.S. Application Serial No. 10/576,153

Claims 19-21, 23, 24, 26, and 28 stand provisionally rejected under the judicially created doctrine of obviousness-type double patenting over Claims 11-15 and 17 of U.S. Application Serial No. 10/576,153 (which has been published as US 2007/0196406). Applicants respectfully traverse.

The '153 application discloses 1,3-dimethylbutylcarboxanilides having the formula



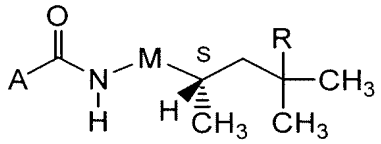
in which **R^1** is hydrogen, (halo)alkyl, haloalkylthio, (halo)alkylsulphinyl, (halo)alkylsulphonyl, (halo)alkoxyalkyl, (halo)cycloalkyl, formyl, formylalkyl, (halo)alkylcarbonylalkyl, (halo)alkoxycarbonylalkyl, (halo)alkylcarbonyl, (halo)alkoxycarbonyl, (halo)alkoxyalkylcarbonyl, (halo)cycloalkylcarbonyl, $-C(=O)C(=O)R^3$ (where R^3 is hydrogen, (halo)alkyl, (halo)alkoxy, (halo)alkoxyalkyl, or (halo)cycloalkyl), $-CONR^4R^5$ (where R^4 and R^5 are independently hydrogen, (halo)alkyl, (halo)alkoxyalkyl, or (halo)cycloalkyl, or together form a heterocycle), or $-CH_2NR^6R^7$ (where R^6 and R^7 are independently hydrogen, (halo)alkyl, or (halo)cycloalkyl, or together form a heterocycle); **R^2** is hydrogen, fluorine, chlorine, methyl, or trifluoromethyl; and **A** can be any of a number of heterocycles similar or identical to those specified in Applicants' claims. E.g., US 2007/0196406 at paragraphs [0003] to [0047].

Although Applicants believe that their claimed invention is patentably distinct from the '153 publication, Applicants would be willing to submit an appropriate terminal disclaimer as suggested in the Office Action if their claims are otherwise found allowable.

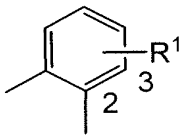
E. U.S. Application Serial No. 10/583,312

Claims 19-21, 23, 24, 26, and 28 stand provisionally rejected under the judicially created doctrine of obviousness-type double patenting over Claims 1, 2, and 4 of U.S. Application Serial No. 10/583,312 (which has been published as US 2007/0276022). Applicants respectfully traverse.

The '312 application discloses optically active carboxamides having the formula



in which **R** is hydrogen, fluorine, chlorine, methyl, ethyl, or trifluoromethyl; **M** is



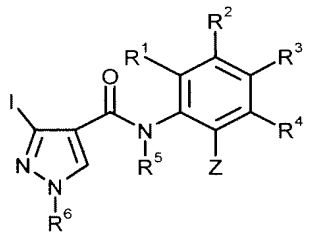
(where R^1 is hydrogen, fluorine, chlorine, methyl, or trifluoromethyl) or one of three thiophene rings similar to those now deleted from Applicants' claims; and **A** can be one of three specified cycles similar to those specified in Applicants' claims. E.g., US 2007/0276022 at paragraphs [0004] to [0014].

Although Applicants believe that their claimed invention is patentably distinct from the '312 application, Applicants would be willing to submit an appropriate terminal disclaimer as suggested in the Office Action if their claims are otherwise found allowable.

F. U.S. Application Serial No. 10/557,083

Claims 19-21, 23, 24, 26, and 28 stand provisionally rejected under the judicially created doctrine of obviousness-type double patenting over Claims 11, 12, and 14 of U.S. Application Serial No. 10/557,083 (which has been published as US 2007/0066673). Applicants respectfully traverse.

The '083 application discloses iodopyrazolylcarboxanilides having the formula



in which $\mathbf{R^1}$, $\mathbf{R^2}$, $\mathbf{R^3}$, and $\mathbf{R^4}$ are independently hydrogen, fluorine, chlorine, methyl, isopropyl, or methylthio; $\mathbf{R^5}$ is hydrogen, (halo)alkyl, haloalkylthio, (halo)alkylsulfinyl, (halo)alkylsulfonyl, (halo)alkoxyalkyl, (halo)cycloalkyl, formylalkyl, (halo)alkyl-carbonyl(halo)alkyl, (halo)alkoxycarbonyl(halo)alkyl, $-COR^7$ (where R^7 is hydrogen, (halo)alkyl, (halo)alkoxy, (halo)alkoxyalkyl, or (halo)cycloalkyl), $-CONR^8R^9$ (where R^8 and R^9 are independently hydrogen, (halo)alkyl, (halo)alkoxyalkyl, or (halo)cyclo-alkyl, or together form a heterocycle), or $-CH_2NR^{10}R^{11}$ (where R^{10} and R^{11} are independently hydrogen, (halo)alkyl, or (halo)cycloalkyl, or together form a heterocycle); $\mathbf{R^6}$ is (halo)alkyl or alkoxyalkyl; and **Z** can be Z^1, Z^2, or Z^3, where Z^1 is optionally substituted phenyl, Z^2 is unsubstituted C_2-C_{20}-alkyl or substituted C_1-C_{20}-

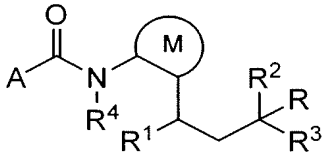
alkyl (where the substituents are halogen or optionally substituted cycloalkyl), and Z^3 is alkenyl or alkynyl that are each optionally substituted by halogen or optionally substituted cycloalkyl, or Z and R^4 together form an optionally substituted carbocyclic or heterocyclic ring (where R^1, R^2, and R^3 would then be hydrogen, fluorine, or chlorine). E.g., US 2007/0066673 at paragraphs [0003] to [0084] (with formula missing from paragraph [0003] but shown in paragraph [0087]).

Although Applicants believe that their claimed invention is patentably distinct from the '083 application, Applicants would be willing to submit an appropriate terminal disclaimer as suggested in the Office Action if their claims are otherwise found allowable.

G. U.S. Application Serial No. 10/597,723

Claims 19-21, 23, 24, 26, and 28 stand provisionally rejected under the judicially created doctrine of obviousness-type double patenting over Claims 1, 2, and 4 of U.S. Application Serial No. 10/597,723 (which has been published as US 2007/0203148). Applicants respectfully traverse.

The '723 application discloses haloalkyl carboxamides having the formula



in which **R** is hydrogen or halogen; $\mathbf{R^1}$ is hydrogen or methyl; $\mathbf{R^2}$ is methyl, ethyl, or haloalkyl; $\mathbf{R^3}$ is halogen or haloalkyl; $\mathbf{R^4}$ is hydrogen, (halo)alkyl, haloalkylthio, (halo)alkylsulfinyl, (halo)alkylsulfonyl, (halo)alkoxyalkyl, (halo)cycloalkyl, formyl, formylalkyl, (halo)alkylcarbonylalkyl, (halo)alkoxycarbonylalkyl, (halo)alkylcarbonyl, (halo)alkoxycarbonyl, (halo)alkoxyalkylcarbonyl, (halo)cycloalkylcarbonyl, $-C(=O)C(=O)R^5$ (where R^5 is hydrogen, (halo)alkyl, (halo)alkoxy, (halo)alkoxyalkyl, or (halo)cycloalkyl), $-CONR^6R^7$ (corrected structure, where R^6 and R^7 are independently hydrogen, (halo)alkyl, (halo)alkoxyalkyl, or (halo)cycloalkyl, or together form a heterocycle), or $-CH_2NR^8R^9$ (where R^8 and R^9 are independently hydrogen, (halo)-alkyl, or (halo)cycloalkyl, or together form a heterocycle); **M** is a phenyl, pyridine, pyrimidine, pyridazine, or pyrazine ring having a single substituent R^{11} (where R^{11} is hydrogen, methyl, methylthio, or trifluoromethyl) or a thiazole ring substituted by $R^{11\text{-}A}$ (where $R^{11\text{-}A}$ is hydrogen, fluorine, chlorine, methyl, isopropyl, methylthio, or

trifluoromethyl); and **A** can be any of a number of heterocycles similar or identical to those specified in Applicants' claims. E.g., US 2007/0203148 at paragraphs [0003] to [0072].

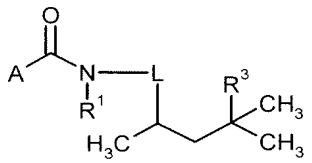
Applicants also take note of the Patani et al article, which beginning at page 3149 discusses several examples of bioisosterism relating to fluorine substitution, including replacement of hydrogen by fluorine (e.g., pages 3149-3150). However, the Patani et al article also teaches that significant differences in biological activity can arise when making such changes, as shown, for example, in Figure 2 (which shows an almost four-fold greater binding affinity going from H to F in one naphthyl-fused diazepine and an almost twenty-fold greater binding affinity for a second naphthyl-fused diazepine), as well as smaller differences shown in Figures 3 and 11. While the fluorine-substituted compounds showed greater activity than their non-fluorinated counterparts in these tests, the specific degree of activity was highly variable and unpredictable from compound to compound and test to test. Therefore, even if is assumed that hydrogen can be replaced with fluorine, that does not necessarily mean that one skilled in the art would be able to predict what activity level would result.

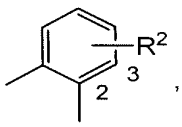
Nevertheless, despite a belief that their claimed invention is patentably distinct from the '726 application, Applicants would be willing to submit an appropriate terminal disclaimer as suggested in the Office Action if their claims are otherwise found allowable.

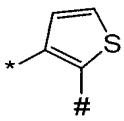
H. U.S. Application Serial No. 10/576,243

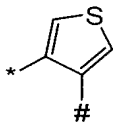
Claims 19-21, 23, 24, 26, and 28 stand provisionally rejected under the judicially created doctrine of obviousness-type double patenting over Claims 20-22, 24-28, and 30 of U.S. Application Serial No. 10/576,243 (which has been published as US 2007/0037858). Applicants respectfully traverse.

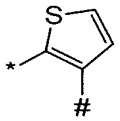
The '243 application discloses hexylcarboxanilides having the formula



in which **L** is 

L-1, 

L-2, 

L-3, or 

L-4 (where the bond marked with * is attached to the amide nitrogen atom and the bond marked with # is attached to the alkyl side chain); **R^1** is hydrogen, (halo)alkyl, haloalkylthio, (halo)-alkylsulphinyl, (halo)alkylsulphonyl, (halo)alkoxyalkyl, (halo)cycloalkyl, formyl, formylalkyl, (halo)alkylcarbonylalkyl, (halo)alkoxycarbonylalkyl (halo)alkylcarbonyl, (halo)alkoxycarbonyl, (halo)alkoxyalkylcarbonyl, (halo)cycloalkylcarbonyl, $-C(=O)C(=O)R^4$ (where R^4 is hydrogen, (halo)alkyl, (halo)alkoxy, (halo)alkoxyalkyl, or (halo)cycloalkyl), $-CONR^5R^6$ (where R^5 and R^6 are independently hydrogen, (halo)-alkyl, (halo)alkoxyalkyl, or (halo)cycloalkyl, or together form a heterocycle), or $-CH_2NR^7R^8$ (where R^7 and R^8 are independently hydrogen, (halo)alkyl, or (halo)-cycloalkyl, or together form a heterocycle); **R^2** is hydrogen, fluorine, chlorine, methyl, or trifluoromethyl; **R^3** is halogen or (halo)alkyl; and **A** can be any of a number of heterocycles similar or identical to those specified in Applicants' claims. E.g., US 2007/0037858 at paragraphs [0003] to [0044].

Although Applicants believe that their claimed invention is patentably distinct from the '243 application, Applicants would be willing to submit an appropriate terminal disclaimer as suggested in the Office Action if their claims are otherwise found allowable.

In view of the preceding amendments and remarks, allowance of the claims is respectfully requested.

Respectfully submitted,

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